### Scientific Meeting

30 November 2008, Sunday

**Trainee Presentation 2008**

#### Board of Adjudicators:
- Dr Luk Wai Sing
- Dr Chan Ka Cheong
- Dr Chu Tsun Cheong
- Dr Ho Fung
- Dr Ngai Chi Man

<table>
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<th>Time</th>
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| 3:00pm – 3:15pm  | **Randomized Clinical Trial to Compare the Postoperative Results of 2 Graft Covering Materials in Myringoplasty: Silicone Sheet (Silatos) and Gelatin Sponge (Spongostan)**  
Dr Chow Man Wai  
Department of ENT, PWH |
| 3:15pm – 3:30pm  | **Thyroid Dysfunction after Total Laryngectomy and Irradiation: 10 Years Follow Up Period**  
Dr Chung Chun Kit, Joseph  
Department of ENT, QMH |
| 3:30pm – 3:45pm  | **Voice Disorders Among School Teachers in Hong Kong: Prevalence and Risk Factors**  
Dr Tang Chi Ho, Eric  
Department of ENT, PWH |
| 3:45pm – 3:55pm  | **Presentation by the Winner of George Choa Prize 2007 and HKSORL-H&NS Thomas Cheung Education Fund Scholarship**  
Dr To Shing Howe, Victor  
Department of ENT, TMH |
| 3:55pm – 4:10pm  | **Tea Break**                                                             |
| 4:10pm – 4:50pm  | **Converging on the Future: The Clinician Knowledge Worker – Fantasy or Fact** |

**Lecture by Professor John Wolfaardt**

**Chairman:** Dr Cheng Choong Boon

**Converging on the Future: The Clinician Knowledge Worker – Fantasy or Fact**
**Randomized Clinical Trial to compare the postoperative results of two graft covering materials in myringoplasty: Silicone Sheet (Silatos) and Gelatin Sponge (Spongostan)**

*Dr Chow Man Wai*

*Department of ENT, Prince of Wales Hospital*

**Objective:**
This study compares the successful rate, post-operative myringitis rate and hearing improvement between 2 groups of patients using different graft-covering materials in myringoplasty: Silicone Sheet (Silatos) and Gelatin Sponge (Spongostan).

**Study Design:**
Randomized single blinded prospective clinical trial

**Methods:**
Patients scheduled to have myringoplasty were recruited and randomized into gelatin sponge group and silicone sheet group according to the random numbers generated by the Random Integer Generator. Myringoplasty was performed using the underlay technique. Successful myringoplasty was defined as no microscopic evidence of perforation beyond postoperative Week 8. Post-operative myringitis was defined as a moist tympanic membrane with or without granulation in the absence of microscopic evidence of perforation and external ear disease beyond postoperative Week 14. Hearing improvement was defined as the presence of air-bone gap closure within 10dB as evidenced in the pure tone audiogram beyond postoperative Week 14. The patients’ particulars, external ear canal and middle ear conditions during operation, seniority of surgeon-in-charge, operative time, postoperative symptoms, and overall patient satisfaction were also recorded.

**Preliminary results of 40 patients:**
1 patient was excluded due to postoperative complication (perilymph fistula). There were 16 patients in the gelatin sponge group (16/39, 41%) and 23 patients in the silicone sheet group (23/39, 59%). The age and sex were comparable between 2 groups. All patients had intact ossicular chains. There was no significant difference in successful rate (75.0% Vs 91.3%), post-myringoplasty myringitis rate (13% Vs 17.4%) and hearing improvement rate (64.3% Vs 73.9%) between 2 groups. The operative time of specialists was significantly shorter than those of junior trainees and there was no significant difference in their successful rate (82.6% Vs 87.5%).

**Conclusion:**
The preliminary results showed a higher successful rate in using the silicone sheet as graft-covering material in myringoplasty. A larger sample size is necessary to validate the preliminary results.

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**Thyroid dysfunction after total laryngectomy and irradiation: 10 years follow up period**

*Dr Chung Chun Kit, Joseph*

*Department of ENT, Queen Mary Hospital*

**Objectives:**
To evaluate thyroid function in patients after total laryngectomy and irradiation. To search for risk factors associated with the occurrence of hypothyroidism.

**Methods:**
Chart review was performed for patients undergoing total laryngectomy and irradiation from 1993 to 2003. Blood test for thyroid function (TSH and free T4) was performed 6 monthly at follow up. Subclinical hypothyroidism defined as high TSH and normal free T4; clinical hypothyroidism defined as high TSH as well as low free T4. The time interval of thyroid dysfunction was also evaluated. Different variables including sex, age, location, T classification, type of surgery and radiotherapy were evaluated for their possible association with the development of hypothyroidism.

**Results:**
Of 147 laryngectomees, 60 (49%) were found to have hypothyroidism. 44% were subclinical hypothyroidism and 5% were clinical hypothyroidism. 19.9% of the 60 patients developed hypothyroidism within 3 years after laryngectomy; 38.6% within 6 years; up to 93.3% of patients had hypothyroidism within 10 year follow up. Hemithyroidectomy during laryngectomy and advanced T classification were associated with the development of hypothyroidism. The relative risks were 2.1 and 1.3 respectively.

**Conclusions:**
Clinical or subclinical hypothyroidism occurred in 49% of patients after total laryngectomy and irradiation. This was associated with those presented with advanced tumour staging and had hemithyroidectomy accompanying laryngectomy. Thyroid function should be evaluated periodically and for a prolonged period since thyroid dysfunction can develop even at 10 year after treatment.
Teachers are at increased risk of developing occupational voice disorders because of the demands that put on their voices at work. We have conducted a survey on the voice disorders among the primary school teachers in Hong Kong. Voice assessments in the form of questionnaires, flexible laryngoscopy and videostroboscopy were carried out for more than 300 teachers from different districts. The purpose of the present study is to evaluate the prevalence and incidence of voice disorders among teaching staffs in Hong Kong and to find out the associated occupational risk factors. We hope that the valuable data could consolidate various measures in the areas of treatment and prevention of voice disorders in the near future.